

Charge to LAPAC
17-18 June 2004 Meeting

The US LARP is at a crucial stage in its development. After two years of minimal budgets (\$0.3M in FY2003, \$1.25M in FY2004), during which the main (but not only) activity has been program planning, the annual budget is expected to rise substantially in the coming years (\$3.2-\$3.5M in FY2005, \$10-11M in FY2006), allowing the launching of substantial technical work. Interest in LARP has grown within the initial three labs, and SLAC has proposed to join the collaboration as well, and this has added to the challenge of matching the program to the available resources.

The US LARP has two complementary goals:

- To advance high energy physics by helping to make the LHC the strongest possible tool for HEP research.
- To advance US accelerator physics and technology.

The LAPAC is asked to evaluate the planned program with regard to:

- The balance between the breadth of the technical program and the available resources.
- How well the program as a whole and its specific elements address and balance between the two program objectives.

Specific questions regarding the program components are:

- Evaluate the plans for participating in machine commissioning, both hardware commissioning and beam commissioning.
- Evaluate the priorities and schedules for beam instrumentation development and implementation.
- Evaluate the plans for accelerator physics, and how they complement the commissioning and instrumentation work.
- Evaluate the proposed collimation R&D program with regard to scientific and technical merit, and the match to the LARP goals. LAPAC's advice is a key element in the process for approving program additions to the LARP.
- Evaluate the balance between dipole and quadrupole R&D, and between technology development and focused model magnet development.